

WE CLAIM:

1. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, the improvement comprising:
 - a housing assembly having a mounting surface for providing a flush mount to the inside surface of the tub, below a fill line of the tub;
 - said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;
 - said input orifice having a vertically oriented porous pop off faceplate screen;
 - a chemical chamber in said housing assembly;
 - said chemical chamber having a chemical that releases and mixes with water having a high velocity water flow, whereby said water is directly induced into a suction line of the whirlpool bathtub leading to the water pump; and
 - wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usages.
2. The apparatus of claim 1, wherein the chemical chamber is removable to facilitate replacement of said microorganism-inhibiting chemical therein.
3. The apparatus of claim 1, wherein the housing assembly further comprises a non-electric cavitation port to shut down a suction force of the pump if the faceplate screen is removed.
4. The apparatus of claim 1, wherein the housing assembly further comprises a non-electric cavitation port to shut down a suction force of the pump if said input orifice is blocked.
5. The apparatus of claim 1, wherein the porous pop off faceplate screen does not deflect more than about $\frac{3}{4}$ inch if a point load of about 50 pounds is applied to a center of said faceplate.

6. The apparatus of claim 1, wherein the porous pop-off faceplate screen has hole openings of over 1000 microns in size.
7. The apparatus of claim 5, wherein the faceplate screen resists hair entrapment.
8. The apparatus of claim 1 further comprising a safety means which blocks the inlet orifice when said safety means is in a closed mode, thereby shutting down a suction force of the pump.
9. The apparatus of claim 8, wherein said safety means enables a shutdown of a suction water force if said chemical chamber is absent or inserted improperly.
10. The apparatus of claim 1, wherein said microorganism-inhibiting chemical is metered.
11. The apparatus of claim 10, wherein said microorganism-inhibiting chemical is in said suction line at a concentration of about 0.25 to about 6.0 parts per million as determined by an opening in said chemical chamber, wherein said opening is sized for various water flows and various tub water capacities.
12. The apparatus of claim 1 further comprising a microprocessor to count at least one bath cycle in a cycle counting run, wherein the bath cycle is initiated at a powering up of said pump.
13. The apparatus of claim 12, wherein said microprocessor ceases pump operation upon reaching a predetermined number of bath cycles in the cycle counting run and until said microprocessor is internally reset to begin another cycle counting run.
14. The apparatus of claim 12, wherein said microprocessor is reset when the chemical in said chemical chamber is replaced.
15. The apparatus of claim 2 further comprising a microprocessor to count at least one bath cycle in a cycle counting run, wherein the bath cycle is initiated at a powering up of said pump.
16. The apparatus of claim 15, wherein said microprocessor is reset when the removable chemical chamber is replaced.

17. The apparatus of claim 1 further comprising indicator lights to signal that the chemical in said chemical chamber requires replacement.

18. The apparatus of claim 16 further comprising indicator lights to signal that the removable chemical chamber requires replacement.

19. The apparatus of claim 1, wherein said combination device does not increase a vacuum in the suction line to the pump by more than 15 inches Hg.

20. The apparatus of claim 1, wherein said combination device has about a 30% or less water pressure restriction rate to an output side of the output jets.

21. The apparatus of claim 1, wherein said combination device retains less than 10 ½ ounces of water after whirlpool bathtub drain down.

22. The apparatus of claim 1 further comprising a replaceable filter screen having hole openings less than about 1000 microns in size.

23. The apparatus of claim 1, wherein said housing assembly is retrofitable in a standard tub.

24. The apparatus of claim 1, wherein the chemical chamber is integrated with the faceplate screen to facilitate replacing said microorganism-inhibiting chemical in the chemical chamber.

25. The apparatus of claim 1, wherein the output orifice has a diameter of at least about 1 ½ inch.

26. The apparatus of claim 1, wherein the input orifice has a diameter of at least about 1 ½ inch.

27. The apparatus of claim 8 further comprising a safety screen in said input orifice to prevent said safety means from being sucked into said housing, thereby preventing hair and body entrapment if said chemical chamber is absent in a drained tub.

28. The apparatus of claim 1, wherein the housing assembly further comprises an electric shut off mechanism to shut down a suction force of the pump if the faceplate screen is removed or said input orifice is blocked.

29. The apparatus of claim 1, wherein the chemical chamber further comprises a chamber which houses a scale reducer substance to inhibit scale buildup in the closed looped piping system.

30. The apparatus of claim 29, wherein said scale buildup further comprises biofilm.

31. The apparatus of claim 1 further comprising a skimmer to intake a low velocity water flow at the fill line of the tub.

32. The apparatus of claim 1, wherein said chemical chamber releases said microorganism-inhibiting chemical for at least five bath loads before said microorganism-inhibiting chemical in said chemical chamber is replaced.

33. The apparatus of claim 2, wherein said chemical chamber releases said microorganism-inhibiting chemical for at least five bath loads before said microorganism-inhibiting chemical in said chemical chamber is replaced.

34. The apparatus of claim 1, wherein said chemical chamber further comprises means for trapping debris.

35. The apparatus of claim 1 further comprising a screen mechanism to prevent debris from the tub from flowing into the output jets and entering the closed loop piping system.

36. A combination sanitation and suction device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of a tub, below a fill line of the tub;

said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;

said input orifice having a vertically oriented porous pop-off faceplate screen;

a chemical chamber mounted on said faceplate screen, thereby providing a suction device to intake all the water in the tub;

said chemical chamber having a chemical that releases and mixes with water having a high velocity water flow, whereby said water is directly induced into a suction line of the whirlpool bathtub leading to the water pump; and

wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usages.

37. The apparatus of claim 36, wherein the chemical chamber mounted on said faceplate screen is removable to facilitate replacement of said microorganism-inhibiting chemical therein.

38. The apparatus of claim 36, wherein said chemical chamber mounted on said faceplate screen is removable to facilitate replacement of said microorganism-inhibiting chemical without having to remove said faceplate screen.

39. The apparatus of claim 36, wherein said chemical chamber mounted on said faceplate screen is integrally formed so said microorganism-inhibiting chemical can be replaced in said chemical chamber without having to remove said faceplate screen.

40. The apparatus of claim 36, wherein said chemical chamber is retrofitably mounted to said faceplate screen.

41. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, the improvement comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of a tub, below a fill line of the tub;

said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;

said input orifice having a vertically oriented porous pop-off faceplate screen;

a chemical chamber;

said chemical chamber having a chemical that releases and mixes with water having a high velocity water flow, whereby said water is directly induced into the closed loop piping system;

wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usage; and

wherein said microorganism-inhibiting chemical is replaced by means of a fill shaft.

42. The apparatus of claim 41, wherein said chemical chamber is mounted in-line with the closed loop piping system.

43. The apparatus of claim 41, wherein said chemical chamber is mounted in said suction device.

44. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, the improvement comprising:

a housing assembly having a mounting surface for providing a flush mount to the inside surface of the tub, below a fill line of the tub;
said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;
said input orifice having a vertically oriented porous pop off faceplate screen;
a chemical chamber in said housing assembly;
said chemical chamber having a chemical that releases and mixes with water having a high velocity water flow, whereby said water is directly induced into a suction line of the whirlpool bathtub leading to the water pump;
wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usage; and
wherein said combination device has about a 30% or less water pressure restriction rate to an output side of the output jets.

45. A combination chemical dispenser and suction device to inhibit microorganism growth in a whirlpool bathtub during use of the bathtub and/or between bathtub usage, said combination device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of a tub, below a fill line of the tub;

said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;

said input orifice having a vertically oriented porous faceplate;

a chemical dispenser mounted inside the housing assembly, thereby providing a suction device to intake all the water in the tub;

wherein said chemical dispenser houses an antimicrobial chemical therein;

wherein said antimicrobial chemical is metered out to produce a concentration of less than about 6 ppm of antimicrobial chemical in said water in a tub during a given bath cycle for a given tub capacity and water flow rate; and

wherein said chemical dispenser is in axial alignment with the input orifice.

46. In combination with a whirlpool bathtub, a combination chemical chamber and suction device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of a whirlpool bathtub;

said housing assembly having an input orifice and an output orifice, said input orifice having a porous faceplate;

a chemical chamber in said housing assembly, thereby providing a combination suction device to intake all water in the bathtub, and to continuously pass said water through said chemical chamber;

said chemical chamber having a chemical that releases and mixes with water;

wherein said chemical concentration in said bathtub does not exceed about 6 ppm after mixing said chemical with said water during a bath cycle under about one hour in duration; and

wherein said chemical inhibits microorganism growth in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usages.

47. In combination with a whirlpool bathtub, a combination chemical chamber and suction device that kills microorganisms in the whirlpool bathtub, said combination chemical chamber and suction device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of the whirlpool bathtub, below a fill line of the whirlpool bathtub;
said housing assembly having an input orifice and an output orifice, said input orifice having a vertically oriented porous faceplate;
a chemical chamber in said housing assembly;
said chemical chamber having a chemical that releases and mixes with water having a high velocity water flow, whereby said water is directly induced into a suction line of the whirlpool bathtub leading to a whirlpool bathtub pump, wherein said chemical inhibits microorganism growth in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usage; and
wherein said combination chemical chamber and suction device retains less than about 10 ½ ounces of water after whirlpool bathtub drain down.

48. In combination with a whirlpool bathtub, a combination high velocity water flow chemical chamber and suction device that kills microorganisms, said combination device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of the whirlpool bathtub, below a fill line of the whirlpool bathtub;
said housing assembly having an input orifice and an output orifice, said input orifice having a vertically oriented porous faceplate;
a chemical chamber in said housing assembly;
said chemical chamber having a chemical that releases and mixes with water that is directly induced into a suction line of the whirlpool bathtub leading to a whirlpool bathtub pump, wherein said chemical inhibits microorganism growth in the whirlpool bathtub;

wherein said combination chemical chamber and suction device retains less than about 10 ½ ounces of water after whirlpool bathtub drain down; and said combination chemical chamber and suction device accommodating a high velocity water flow of more than about 70 gallons per minute.

49. In combination with a whirlpool bathtub, a combination high velocity water flow chemical chamber and suction device that kills microorganisms, said combination device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of the whirlpool bathtub, below a fill line of the whirlpool bathtub;

said housing assembly having an input orifice and an output orifice, said input orifice having a vertically oriented porous faceplate;

a chemical chamber in said housing assembly;

said chemical chamber having a chemical that inhibits microorganism growth in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usages;

said combination chemical chamber and suction device accommodating high velocity water flow;

wherein said high velocity water flow contacts said microorganism-inhibiting chemical that releases and mixes with said high velocity water and is directly induced into

a suction line of the whirlpool bathtub leading to a whirlpool bathtub pump; and

wherein said combination chemical chamber and suction device retains less than about 10 ½ ounces of water after whirlpool bathtub drain down.

50. In combination with a whirlpool bathtub, a combination high velocity water flow chemical chamber and suction device that kills microorganisms, said combination device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of the whirlpool bathtub, below a fill line of the whirlpool bathtub;

said housing assembly having an input orifice and an output orifice, said input orifice having a vertically oriented porous faceplate that resists hair entrapment;
a removable chemical chamber with an attachment member for insertability into said housing assembly;
said removable chemical chamber having a chemical that inhibits microorganism growth in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usages;
said combination chemical chamber and suction device accommodating high velocity water flow;
wherein said high velocity water flow contacts said microorganism-inhibiting chemical that releases and mixes with said high velocity water and is directly induced into a suction line of the whirlpool bathtub leading to a whirlpool bathtub pump; and
wherein said combination chemical chamber and suction device retains less than about 10 ½ ounces of water after whirlpool bathtub drain down.

51. In combination with a whirlpool bathtub, a combination high velocity water flow chemical chamber and suction device that kills microorganisms, said combination device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of the whirlpool bathtub, below a fill line of the whirlpool bathtub;
said housing assembly having an input orifice and an output orifice, said input orifice having a vertically oriented porous faceplate;
an axially aligned adjustable removable chemical chamber with an attachment means for insertability into said housing assembly;
said removable chemical chamber housing a chemical that releases and mixes with water having a high velocity water flow, whereby said water is directly induced into a suction line of the whirlpool bathtub leading to a whirlpool bathtub pump;
wherein said chemical inhibits microorganism growth in the whirlpool bathtub;

wherein said combination chemical chamber and suction device retains less than about 10 ½ ounces of water after whirlpool bathtub drain down; and a microprocessor to count at least one bath cycle in a cycle counting run, wherein the bath cycle is initiated at a powering up of said pump.

52. In combination with a whirlpool bathtub, a combination high velocity water flow chemical chamber and faceplate device that inhibits microorganism growth in a whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usage, said combination device comprising:

- a housing assembly having a mounting surface for providing a flush mount to an inside of the whirlpool bathtub, below a fill line of the whirlpool bathtub;
- said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;
- said input orifice having a porous faceplate screen;
- a chemical chamber mounted on said faceplate screen, thereby providing a suction device to intake all the water in the tub;
- said chemical chamber having a chemical that releases and mixes with water having a high flow rate, whereby said water is directly induced into a suction line of the whirlpool bathtub leading to the water pump, wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub; and
- wherein said chemical chamber mounted on said faceplate screen is removable to facilitate replacement of said microorganism-inhibiting chemical without having to remove said faceplate screen.

53. In combination with a whirlpool bathtub, a combination high velocity water flow chemical chamber and faceplate device that inhibits microorganism growth in a whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usage, said combination device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of the whirlpool bathtub, below a fill line of the whirlpool bathtub;
said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;
said input orifice having a porous faceplate screen;
a chemical chamber mounted on said faceplate screen, thereby providing a suction device to intake all the water in the tub;
said chemical chamber having a chemical that releases and mixes with water having a high velocity flow rate, whereby said water is directly induced into a suction line of the whirlpool bathtub leading to the water pump;
wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub; and
said chemical chamber mounted on said faceplate screen is integrally formed so said microorganism-inhibiting chemical can be replaced in said chemical chamber without having to remove said faceplate screen.

54. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, the improvement comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of a tub, below a fill line of the tub;
said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;
said input orifice having a vertically oriented porous pop-off faceplate screen;
a chemical chamber mounted inline with the closed loop piping system;
said chemical chamber having a chemical that releases and mixes with water having a high flow rate, whereby said water is directly induced into the closed loop piping system;

wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usage; and wherein said microorganism-inhibiting chemical is replaced by means of a fill shaft.

55. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, the improvement comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside of a tub, below a fill line of the tub;

said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;

said input orifice having a vertically oriented porous pop-off faceplate screen;

a chemical chamber mounted in said suction device;

said chemical chamber having a chemical that releases and mixes with water having a high velocity flow rate, whereby said water is directly induced into the closed loop piping system;

wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usage; and wherein said microorganism-inhibiting chemical is replaced by means of a fill shaft.

56. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, the improvement comprising:

a housing assembly having an input orifice and an output orifice;

a chemical chamber mounted in said housing assembly;

said chemical chamber having a chemical that releases and mixes with water that is directly induced into the closed loop piping system, wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usage;

said chemical chamber having a screen means to prevent said microorganism-inhibiting chemical from being sucked into said output orifice by a high velocity flow of water; and
wherein said microorganism-inhibiting chemical is replaced by means of a fill shaft on a per-use basis.

57. In combination with a whirlpool bathtub, a combination high velocity water flow chemical chamber and suction device that kills microorganisms, said combination device comprising:

a housing assembly having a mounting surface for providing a flush mount to an inside surface of the bathtub, below a fill line of the bathtub;
said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;
said input orifice having a vertically oriented porous pop off faceplate screen;
a chemical chamber in said housing assembly, thereby providing a high velocity water flow suction device to intake high velocity water below said fill line of the bathtub;
a skimmer to intake a low velocity water flow at said fill line of the bathtub;
wherein said low velocity water flow combines with said high velocity water flow, said combined flow passing said chemical chamber having a chemical that releases and mixes with said combined water that is directly induced into a suction line of the whirlpool bathtub leading to a water pump; and
wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usages.

58. The apparatus of claim 56, wherein said chemical chamber further comprises means for trapping debris.

59. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction

device having a faceplate, a method for retrofitting the faceplate, the method comprising the steps of:

- providing the faceplate;
- cutting an opening in said faceplate;
- attaching a chemical chamber having an aperture to said faceplate by inserting said chemical chamber into the opening cut into said faceplate and securing said chemical chamber to said faceplate by an attachment means;
- inserting a microorganism-inhibiting chemical in said chemical chamber; and
- placing a cover over said chemical chamber, thereby forming a combination faceplate and antimicrobial dispenser that dispenses said microorganism-inhibiting chemical into the closed looped piping system of the whirlpool bathtub when a high velocity water contacts said microorganism-inhibiting chemical.

60. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, said combination device comprising:

- a housing assembly means having a mounting surface, said housing assembly means functioning to provide a flush mount to the inside surface of the tub, below a fill line of the tub;
- said housing assembly means having an inlet means functioning to intake high velocity water below said fill line of the tub, and an outlet means functioning to discharge water passing through said combination device into the closed loop piping system, and a shape to enable drainage;
- said inlet means having a porous faceplate means functioning to cover said combination device; and
- a chemical chamber means in said housing assembly means, said chemical chamber means functioning to house and release a chemical means;

said chemical means functioning to mix with water that is directly induced into a suction line of the whirlpool bathtub leading to the water pump and functioning to inhibit growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usages;

said chemical chamber means releases said chemical means for a plurality of bath loads before said chemical means in said chemical chamber means is replaced;

and

said combination device having high velocity water flow of at least about 70 gallons per minute.

61. The apparatus of claim 60, wherein said plurality of bath loads is preferably at least five.

62. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, said combination device comprising:

a housing assembly means having a mounting surface, said housing assembly means functioning to provide a flush mount to the inside surface of the tub, below a fill line of the tub;

said housing assembly means having an inlet means functioning to intake high velocity water below said fill line of the tub, and an outlet means functioning to discharge water passing through said combination device into the closed loop piping system, and a shape to enable drainage;

said inlet means having a porous faceplate means functioning to cover said combination device; and

a removable chemical chamber means in said housing assembly means, said removable chemical chamber means functioning to house and release a chemical means;

said chemical means functioning to mix with water that is directly induced into a suction line of the whirlpool bathtub leading to the water pump and functioning to inhibit growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usages;

said chemical chamber means releases said chemical means for a plurality of bath loads before said chemical means in said chemical chamber means is replaced;

and

said combination device having high velocity water flow of about at least 70 gallons per minute.

63. The apparatus of claim 62, wherein said plurality of bath loads is preferably at least five.

64. A microorganism-inhibiting whirlpool bath comprising:

tub means functioning to hold water, said tub means having an inside surface;

closed loop piping means functioning to pipe water into and out of said tub means;

pump means functioning to pump water through said closed loop piping means;

output jet means functioning to discharge water from said closed loop piping means into said tub means;

a combination suction device mounted below a fill line of the tub means, said combination device having a housing assembly means with a mounting surface, said housing assembly means functioning to provide a flush mount to said inside surface of the tub means;

said housing assembly means having an inlet means functioning to intake high velocity water below said fill line of the tub means, and an outlet means functioning to discharge water passing through said combination suction device into said closed loop piping means, and a shape to enable drainage, said inlet means having a porous faceplate means functioning to cover said combination suction device;

a chemical chamber means functioning to house and release a chemical means, said chemical means functioning to mix with water that is directly induced into a suction line of the whirlpool bath leading to the pump means and functioning to inhibit growth of microorganisms in the whirlpool bath during whirlpool bath use and/or between whirlpool bath usages;

wherein a concentration of said chemical means in said tub means does not exceed about 6 ppm after mixing said chemical means with said water during a bath cycle under about one hour in duration; and

wherein said whirlpool bath retains less than 2 ounces of water per output jet means after whirlpool bath drain down.

65. In combination with a whirlpool bath, said whirlpool bath having a tub component, the tub component having an inside surface component, a closed loop piping system component, a water pump component, output jet components and a suction device component, the improvement comprising:

a housing assembly having a mounting surface for providing a flush mount to the inside surface component of the tub component, below a fill line of the tub component;

said housing assembly having an input orifice and an output orifice, and a shape to enable drainage;

said input orifice having a vertically oriented porous pop off faceplate screen;

a chemical chamber in said housing assembly;

said chemical chamber having a chemical that releases and mixes with water having a high velocity water flow, whereby said water is directly induced into a suction line of the whirlpool bathtub leading to the water pump component;

wherein said chemical inhibits growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use; and

wherein said whirlpool bath has antimicrobial additives impregnated in at least one component of the whirlpool bath.

66. The apparatus of claim 65, wherein said antimicrobial additives- impregnated component is selected from the group consisting of the tub component, the inside surface component, the closed loop piping system component, the water pump component, the output jet components, and the suction device component.

67. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, a combination inline chemical chamber and suction device that inhibits growth of microorganisms in the tub, said combination chemical chamber and suction device comprising:

a housing assembly having a mounting surface for providing a flush mount to the

inside surface of the tub, below a fill line of the tub;

said housing assembly having an input orifice and an output orifice, and a shape to

enable drainage;

said input and output orifices each having a diameter of at least about 1 inch;

said input orifice having a vertically oriented porous pop off faceplate screen;

a chemical chamber in said housing assembly;

said chemical chamber having a chemical that releases and mixes with water having a

high velocity water flow, whereby said water is directly induced into a suction

line of the whirlpool tub leading to the water pump; and

wherein a concentration of said chemical does not exceed about 6 ppm after mixing

said chemical with said water during a bath cycle of less than about one hour in

duration; and

wherein said combination device retains less than 10 ½ ounces of water after whirlpool

bathtub drain down.

68. In combination with a whirlpool bath, said whirlpool bath having a tub, the tub having an inside surface, a closed loop piping system, a water pump, output jets and a suction device, a combination device comprising:

a housing assembly means having a mounting surface, said housing assembly means functioning to provide a flush mount to the inside surface of the tub, below a fill line of the tub;

said housing assembly means having an inlet means functioning to intake high velocity water below said fill line of the tub, and an outlet means functioning to discharge water passing through said combination device into the closed loop piping system, and a shape to enable drainage;

said inlet means having a porous faceplate means functioning to cover said combination device; and

a porous member means having a chemical means thereon, said porous member means functioning to cover said porous faceplate means;

said chemical means functioning to mix with water that is directly induced into a suction line of the whirlpool bathtub leading to the water pump, thereby passing through said porous faceplate means, and functioning to inhibit growth of microorganisms in the whirlpool bathtub during whirlpool bathtub use and/or between whirlpool bathtub usages; and

wherein a concentration of said chemical does not exceed about 6 ppm after mixing said chemical means with said water during a bath cycle of less than about one hour in duration.

69. The apparatus of claim 68, wherein the porous member means is removable.